

expenditures (\$11,538.8) than controls (\$42,18.7, $p < 0.0001$). Among the PsO patients, those with any psychiatric disorders had a total health care expenditure of \$18,046.70, as compared with \$10,503.50 for those without psychiatric disorders ($p < 0.0001$). **CONCLUSIONS:** PsO patients have a significantly higher prevalence of psychiatric disorders as compared with patients without PsO. PsO patients with psychiatric disorders have significantly higher health care expenditure than those without such disorders.

PSS2

EFFECTIVENESS OF THE RESTOR MULTIFOCAL INTRAOCULAR LENS (IOL) IN CATARACT AND PRESBYOPIA SURGERIES IN TWO EUROPEAN COUNTRIES

Berdeaux G¹, Feneron D², Meunier J³, Viala-Danten M³, Arnould B³, Maurel F⁴

¹Alcon France, Rueil-Malmaison, France, ²IMS Health, Puteaux, France,

³Mapi Values, Lyon, France, ⁴Aremis, Neuilly sur Seine, France

OBJECTIVES: To determine the proportion of cataract patients requiring glasses at least 18 months after a bilateral implantation of the ReSTOR(r) multifocal IOL, assess post-operative patient satisfaction, and identify factors contributing to post-operative eyeglass independence. **METHODS:** This cross-sectional study was performed in France and Spain. Patients were selected at random from medical charts of 10 centers. Medical data and surgical procedure characteristics were collected retrospectively from patient charts. A new specific scale, the Freedom from Glasses Value Scale (FGVS) was administered to patients by phone interview. FGVS scores range from 1 to 5, with 5 being the most favourable score. A Bayesian network was constructed to predict post-operative spectacle wear using FGVS items and scores. **RESULTS:** A total of 304 patients with a mean age of 65.6 years were included. On average, the last eye surgery was carried out 2.0 years before survey administration. Pre-operatively, 62.5% of patients had a Snellen decimal distance visual acuity superior to 0.8. Post-operative acuity was better than 0.8 for 93.3% and 88.6% of the patients' uncorrected near and distance vision, respectively. Whereas 93.4% of patients wore glasses before surgery, 87.2% were spectacle free after surgery. Patients were very satisfied: 88% indicated that since surgery their vision was better and 93% thought the surgery produced a positive change. FGVS mean scores were: 3.81 and 3.80 respectively for practical and psychological advantages; 4.52 for evaluation of the result; 4.41 for feelings; and 4.47 for global judgment. The Bayesian network demonstrated two contributors to postoperative spectacle independence. Patients who perceive considerable bother associated with wearing glasses, and those sensitive to the opinions of others about their appearance without glasses, are 3 times less likely to wear glasses post-operatively. **CONCLUSIONS:** These study results confirm clinical trial findings. In actual medical practice over multiple years, ReSTOR® IOL implantation provides both good distance and near vision, a high level of spectacle independence, and high patient satisfaction. Beyond good results from the lens, a desire for spectacle freedom contributes to post-operative independence from eyeglasses

PSS3

VISION WITH RESTOR®, ARRAY® SA40 AND A MONOFOCAL INTRA-OCULAR LENS (IOL) AFTER CATARACT SURGERY

De vries N¹, Lafuma A², Laurendeau C³, Berdeaux G⁴, Nuijts R¹

¹University Hospital Maastricht, Maastricht, The Netherlands, ²Cemka eval, Bourg-la-Reine, France, ³Cemka-Eval, Bourg-la-Reine, France,

⁴Alcon France, Rueil-Malmaison, France

OBJECTIVES: The aim of this study was to compare vision 6 months after cataract surgery in patients implanted with one of

three IOLs: a monofocal or a multifocal (ReSTOR® or ARRAY-SA40®). The latter two often free patients from spectacles for near and distance vision. **METHODS:** A randomized clinical trial comparing ARRAY-SA40® with a monofocal was pooled with a prospective cohort of patients implanted with ReSTOR®. Patient satisfaction, spectacle freedom rate, and corrected and uncorrected, near and distance visual acuities (VA) were measured six months after surgery. Treatment group comparability was checked at baseline. Imbalances on confounding factors were adjusted using both linear models and propensity scores. **RESULTS:** Sixty-nine patients had a monofocal, 68 received the ARRAY-SA40® and 83 were implanted with ReSTOR®. ReSTOR® patients were younger ($P < 0.0001$) and had a lower neuroticism score ($P < 0.001$). The sex-ratio was six females: four males. VA and spectacle dependency at baseline were comparable. At 6 months no difference was observed on distance VA, corrected or uncorrected. Uncorrected near VA of ReSTOR® patients was better ($P < 0.0001$) than with either a monofocal IOL or ARRAY-SA40®. The probability of being free of spectacles with ReSTOR was higher ($P < 0.0001$) than with a monofocal (RR = 10.2) or an ARRAY-SA40® (RR = 10.7). ReSTOR® patients wearing spectacles never had multifocal glasses (the most expensive), while 32% of ARRAY-SA40® and 52% of the monofocal patients did. Good or excellent near vision satisfaction with ReSTOR® was more often reported by patients than with the ARRAY-SA40® or a monofocal (83.6%, 32.4%, 26.1%, respectively; $P < 0.0001$). The corresponding satisfaction difference did not reach statistical significance with distance vision (82.1%, 75.0%, 67.7%, respectively; $P < 0.17$). Linear and propensity score adjustments did not modify the results. **CONCLUSIONS:** The uncorrected distance VA of the three IOLs was similar. Near uncorrected VA in ReSTOR® patients was better than in patients implanted with a monofocal or ARRAY-SA40®, resulting in a higher spectacle independence rate and better near vision patient satisfaction.

PSS4

RESTOR® VERSUS ACRILISA® ND-YAG LASER INCIDENCE RATE COMPARISON ONE YEAR AFTER SURGERY

Gauthier L¹, Lafuma A², Laurendeau C², Berdeaux G³

¹Polyclinique Côte Basque Sud, Saint Jean de Luz, France,

²Cemka-Eval, Bourg-la-Reine, France, ³Alcon France, Rueil-Malmaison, France

OBJECTIVES: The aim of this study was to compare the one year Nd:Yag laser incidence rate of two multifocal intra-ocular lenses, ReSTOR® and Acrilisa®, implanted by a single surgeon following his usual practices **METHODS:** This retrospective study was based on all patients implanted with a ReSTOR® or Acrilisa® multi-focal lens since the third trimester of 2004 at one site. All patients with either cataract or clear lens were operated by the same surgeon. Characteristics of the subjects, as well as pre and post-op medical data were obtained from patient charts. One year post surgical data were obtained from the surgeon's medical files and from other ophthalmologists, if any, involved in post-surgical care. Time to Nd:Yag laser analysis was carried out using Kaplan-Meier survival curves. Imbalance on confounding variables was adjusted with a Cox model. **RESULTS:** Eighty patients were bilaterally implanted with ReSTOR® and 76 with Acrilisa®. Patients with ReSTOR® were more often male (52.5% versus 30.7%; $P < 0.001$) and younger (63.1 versus 65.8; $P < 0.001$). After one year of follow-up, 3.7% of the ReSTOR® eyes had Nd:Yag laser versus 11.6% of the Acrilisa® eyes. Gender was not found to be associated with Nd:Yag laser while older patients were less prone to have capsulotomy (RR = 0.91, IC95% [0.83–1.00], $P = 0.05$). Eyes with Acrilisa® had 3.54

(IC95% [1.14–10.94]; $P = 0.03$) more chances to have Nd:Yag laser than ReSTOR® eyes, after adjusting for age at surgery. **CONCLUSIONS:** This analysis conducted at one year suggested that following usual surgical practice in a private setting, ReSTOR® eyes had significantly less capsulotomy than those implanted with Acrilisa®. Avoiding Nd:Yag laser and its potential complications is important, especially in a young population. Analyses at two and three years will be required to confirm these findings

PSS5

IMPACT OF COMPLIANCE ON INTRA-OCULAR PRESSURE (IOP) CONTROL IN GLAUCOMA PATIENTS

Lafuma A¹, Laurendeau C¹, Jeanbat V¹, Berdeaux G²

¹Cemka-Eval, Bourg-la-Reine, France, ²Alcon France, Rueil-Malmaison, France

OBJECTIVES: To identify and characterize glaucoma patient compliance profiles and to evaluate the impact on treatment efficacy. **METHODS:** A computerized device (Travalert®) that collects daily instillation time and number of drops was given to a cohort of patients for three months. A patient was declared compliant when at least 2 drops per day were instilled, one in each eye. Two compliance rates were calculated per week: during the weekend and the remaining 'working' days. Principal component analysis (PCA) was performed followed by an ascendant hierarchical classification (AHC) to identify groups of compliant patients. Their characteristics were compared using chi-square or ANOVA. **RESULTS:** A total of 113 patients were included (mean age 66.5, 51.8% male), and 86.7% had primary open angle glaucoma. Mean IOP was 24.2 mmHg before using Travalert®. 57.5% were treated with DuoTrav® and 42.5% with Travatan®. PCA identified two axes (compliance intensity and week effect), explaining 63.0% of the variance. AHC identified 3 compliance groups: good (56.6% of the patients, compliance around 80%), mild (21.2% of the patients, compliance around 50%) and poor (22.1% of the patients, compliance around 20%). No predictive variables (demographic or medical) of poor compliance were identified. At the last visit, IOP was 16.1 mmHg on average and statistically significantly higher in the poor compliance group (17.7 mmHg; $P = 0.02$). **CONCLUSIONS:** Compliance, measured objectively with a medical device, remains a major issue in glaucoma treatment since about half the patients had compliance lower than 80%. This impacted IOP control, a surrogate endpoint of glaucoma progression. None of the medical and demographics variables were associated with poor compliance suggesting that forthcoming compliance research should identify new targets (e.g. behavior) to identify patients benefiting from a compliance training program.

PSS6

EFFECTIVENESS OF MOXIFLOXACIN IN THE TREATMENT OF BACTERIAL CONJUNCTIVITIS IN ADULTS

Lafuma A¹, Koshnood B¹, Laurendeau C¹, Berdeaux G²

¹Cemka-Eval, Bourg-la-Reine, France, ²Alcon France, Rueil-Malmaison, France

OBJECTIVES: To estimate the effectiveness of moxifloxacin in the treatment of bacterial conjunctivitis in adults using data from the available randomized clinical trials **METHODS:** Four randomized clinical trials were identified. Three compared moxifloxacin against placebo and one against ofloxacin. Effectiveness parameters included early (day 3 to 5) and late (day 7 to 10) clinical efficacy, late bacteriological efficacy, and drop-out due to lack of efficacy. Fixed (Mantel-Haenszel) and random (Der Simonian and Laird) effects models for risk ratios and risk differences associated with treatment effects were estimated and

tests of homogeneity of effects across studies were done. All analyses were conducted on the intention to treat population. **RESULTS:** A total of 609 moxifloxacin-treated patients and 606 placebo-treated patients were included in the meta-analysis. Drop-out rates due to lack of efficacy were consistently higher for patients receiving placebo. However, there was significant heterogeneity in the estimates of drop-out rates for moxifloxacin and placebo groups across studies ($p = 0.04$). The probability of both an early and a late clinical remission was higher with moxifloxacin (RR, 1.17, $P = 0.001$; RR, 1.13; $P = 0.05$, respectively). The late bacteriological remission rate was about 25% higher (RR, 1.26, $P = 0.001$) for patients treated with moxifloxacin. Eleven patients had to be treated with moxifloxacin to gain one additional clinical remission and 6 to gain one more bacteriological remission. In comparison to ofloxacin, the probability of drop-out due to lack of efficacy for the bacteriologically documented population was 2.63-fold lower ($P = 0.03$) with moxifloxacin; one extra failure could be avoided for every 19 patients treated. **CONCLUSIONS:** This meta-analysis suggests higher clinical and bacteriological efficacy of Moxifloxacin compared with placebo. The estimates reported here should be interpreted with caution, given the small number of clinical trials with published results. The lower proportion of drop-outs for patients treated with moxifloxacin compared with ofloxacin suggests a lower use of rescue treatments for patients receiving moxifloxacin.

PSS7

A MIXED TREATMENT COMPARISON OF TOPICAL OCULAR HYPOTENSIVES FOR THE TREATMENT OF GLAUCOMA AND OCULAR HYPERTENSION

Orme M¹, Loftus J², Collins S¹, Kelly S²

¹Abacus International, Bicester, Oxfordshire, UK, ²Pfizer Ltd, Walton on the Hill, Surrey, UK

OBJECTIVES: To compare the efficacy of topical ocular hypotensives for the treatment of intraocular hypertension and glaucoma. Adverse events that may affect patients' willingness to comply with treatment were also assessed. **METHODS:** A systematic review was conducted to identify randomized controlled trials in patients with glaucoma or ocular hypertension with a prostaglandin analogue treatment arm. A total of 181 eligible articles were identified with 73 suitable for meta-analysis. A mixed treatment comparison (MTC) was performed to estimate the relative efficacy of the treatments. Studies connected to latanoprost and reporting the mean and standard deviation in absolute intraocular pressure (IOP) at three months were used in the MTC since this maximised the analysis dataset. Baseline IOP was included as a covariate in the MTC. Random effects models were used, as study variance indicated some degree of heterogeneity. A second MTC was conducted to estimate the rate of hyperaemia-type adverse events. **RESULTS:** The mean IOP at three months for latanoprost is 17.42 mmHg from a baseline of 23.5 mmHg. Latanoprost is statistically significantly better at lowering IOP versus timolol, and latanoprost and timolol is statistically significantly more efficacious versus latanoprost alone. There were no further statistically significant differences in mean IOP for latanoprost versus any other treatments. The hyperaemia event rate for latanoprost is 25.18%. Using the odds ratio results compared to latanoprost, timolol has a statistically significantly lower event rate. Travoprost, bimatoprost, travoprost and timolol, bimatoprost and timolol, latanoprost and brimonidine, latanoprost and dorzolamide have statistically significantly higher event rates. **CONCLUSIONS:** The results indicate that there is no clinically relevant difference in IOP lowering between treatments except for timolol. However there are